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ABSTRACT

This paper reports on a follow-up study of teacher education program graduates that was conducted by a consortium of 11 universities to gain evidence of their students' performance, to determine the effectiveness of their programs, and to compare graduates of 4-year and 5-year teacher education programs. Two instruments were developed and distributed. The first, a survey, was completed by 1,390 graduates and included entry and retention data, self-reports of attitude toward teaching, preferred methods of teaching, and leadership behaviors; the second, a teacher effectiveness survey, provided principals' (N=481) evaluations of teaching performance. Results include: (1) graduates of extended programs enter teaching at significantly higher rates and show higher rates of retention than do graduates of 4-year programs; (2) great program variation exists among institutions; (3) there are outstanding programs of many types in teacher education; (4) certain institutions produce graduates who stand out in certain outcome areas; and (4) institutions can learn from each other how better to prepare teachers. (Contains 15 references.) (LL)

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AN OUTCOME ASSESSMENT OF GRADUATES OF ELEVEN TEACHER EDUCATION PROGRAMS

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AN OUTCOME ASSESSMENT OF GRADUATES OF ELEVEN TEACHER EDUCATION PROGRAMS

The following article is developed from a study of the Eleven University Coalition to Follow Up Graduates of Teacher Education Programs. The purpose of this article is to describe the performance of graduates of the eleven universities who actually became teachers.

We define outcome assessment to mean the evaluation of teacher education based on assessment of broadly defined goals of teacher education. We have chosen two basic goals of teacher education. The first is to place good teachers in America's classrooms; teachers whose performance is judged positively by the people who run schools. The second is to produce teachers who actively participate to improve instruction and to improve schools. The following four indicators were used to assess program success in achieving these goals; entry into the profession, retention in the profession, classroom performance and leadership behavior.

Entry into the profession and retention are basic to placing teachers in America's classrooms. Nationally, nearly thirteen hundred institutions of higher education and a number of alternative programs commit substantial resources to the preparation of teachers. We assume that these programs claim to be preparing teachers whom they judge to be both well prepared to begin teaching and with potential for good service to the profession. If the graduates who are judged to be well prepared do not enter teaching, then the institutions's effort has not been successful. If the graduates who are judged to be well prepared, do not remain in the profession for a reasonable period of time, then the institution's effort has not been successful. It is analogous to an industry preparing a product for market. If the product is not purchased or does not last in service for a reasonable period of time, then the industry has not been successful.

The level of performance of graduates, as judged by the people who run the schools, is also a basic indicator of success. If the customer does not think the product is as good or better than other available teachers, then the effort has not been a success.

Finally, if we expect teachers to be active participants is the improvement of schools then we can expect evidence that teachers we produce take active leadership roles.

We are also interested in discovering patterns of organization and program designs in teacher education that are particularly successful in achieving results in our four outcome areas. We can learn from each other how to better prepare good teachers. We can also compare our graduates against those of similar institutions.

We choose four outcomes (entry, retention, classroom performance and leadership) as basic indicators of success in teacher preparation.

Pertinent research questions for our study include:

(1) What are the performance levels of teacher education graduates from the eleven institutions between 1985 and 1990 as measured by entrance into the profession (taught at least one year), retention, general assessment of teaching effectiveness and leadership behaviors?

(2) Are there differences in performance levels of graduates of four and five year programs as measured by entrance into the profession, retention, general assessment of teaching effectiveness and leadership behaviors?

(3) Are there individual institutions and programs whose graduates excel in any performance areas as measured by entrance into the profession, retention, general characteristics of teaching effectiveness and leadership behaviors?

Background for the Study

In 1990 a consortium of eleven universities and schools across the United States was formed. Members shared an interest in the follow-up of graduates of teacher education programs to gain evidence of the performance of their students, the effectiveness of their programs and a special interest in comparing graduates of four-year and five-year teacher education programs. They hoped to base comparisons of teacher education graduates and programs on classroom performance as well as the more common background and attitude variables available from follow-up studies. Informal meetings at the 1990 national conventions of AERA and AACTE led to a planning conference at the University of New Hampshire in November of 1990. The institutions and their chief project contributors are listed below.

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Eight of the eleven institutions had initiated integrated "five-year" teacher education programs (programs which combined professional studies at both undergraduate and graduate levels). Four of the eight (Austin College, University of New Hampshire, University of Kansas and University of Florida) had pioneered the integrated "five-year" program movement and had been making plans for this joint research venture since 1984. Several consortium members had "fifth-year," post-BA entry programs. Other institutions were considering restructuring their teacher preparation programs.

A preliminary study of graduates of four-year and five-year programs at the University of New Hampshire (Andrew, 1990) had suggested many significant differences in graduates of four and five year programs.

Research Instruments and Methodology

Two instruments were developed for this study: (1) a survey of graduates which included entry and retention data, description of job sites, self-reports of attitude toward teaching, preferred methods of teaching, and leadership behaviors; and (2) the Teacher Effectiveness Survey which provided principals' evaluations of teaching performance.

The two surveys utilized in this study were developed by a primary research team of five faculty members and one graduate assistant at the University of New Hampshire. "The Survey of Graduates" was designed to gather information on characteristics and attitudes of graduates and their job history. The "Teacher Effectiveness Survey" was designed for principals to rate the graduate's effectiveness

in the classroom. The primary research team field tested the first draft of the surveys with eight graduates and eight building principals. After revisions were made as a result of the field test, the primary team distributed the surveys to the project directors at each of the eleven institutions for review and confirmation of face validity. In November of 1990 the project directors from the Consortium met on the campus of the University of New Hampshire to finalize instrumentation, research questions and the procedures for gathering data.

The four page Survey of Graduates was comprised of eight sections. They were:

Section 1 - background information about the graduates and the type of educational setting where they were employed.

Section 2 - nature of teacher preparation program.

Section 3 - attitudes toward teaching.

Section 4 - instructional approaches of graduates.

Section 5 - efficacy assessment.

Section 6 - teacher leadership.

Section 7 - an open-ended question asking graduates how they stood out from other teachers.

Section 8 - The final section of the survey asked the graduates' permission to contact their principal for an evaluation of their performance in the classroom.

The Teacher Effectiveness Survey (Principal's survey) was developed after the primary research team reviewed teacher evaluation instruments from school districts and statewide plans. Several institutions wished to add measures of teacher leadership behavior since these behaviors reflected specific program goals and corresponded with an emerging emphasis on expanded leadership roles for teachers. These items were developed by the team for both the student and the principals' surveys. The team sought an instrument that would measure general qualities of

teacher effectiveness without having to provide training in its use for the principals. The team decided that no available instrument fit the needs of the study.

The final Teacher Effectiveness Survey was designed by the primary team and had three parts. The first part asked the principal to rate the graduate's performance in relation to teachers with similar experience. The principal was asked to place the graduate in one of four quartiles. The second part asked principals to rate the performance of the graduate on 35 items by a five point Likert scale (very low to very high). This part of the survey was developed by taking selected items from The University of Connecticut Survey of Graduates (Gable, 1989), the Beginning Teacher Competencies in Connecticut (Styreifer & Iwanicki, 1987), and a variety of classroom observation instruments. The survey was factor analyzed and reliability information was calculated (Barton, Andrew & Schwab, 1993). The factor analysis identified three factors: instruction, professional attitudes, and leadership qualities that were measured by 24 items (See Figure 1). Based on the results of the validation study, the survey was determined to be both valid and reliable. The last part of the instrument asked the supervisor to respond to an open ended question describing characteristics of the graduates that would make them stand out from other teachers.

Figure 1: Factors and Items: Teacher Effectiveness Survey

Factor I - Instruction	*Item Number*
Works effectively with exceptional children in regular classrooms.	6
Demonstrates knowledge of subject area.	12
Plans and organizes lessons and activities effectively.	13
Relates students' physical, social, emotional and intellectual development to planning and organizing instruction.	15
Teaches in clear and logical manner.	19
Employs a variety of teaching techniques.	22
Effectively involves all students in learning.	27
Provides prompt feedback to students and assists them in the evaluation of their own growth.	28
Holds high but reasonable expectations.	29
Exhibits skill in managing class.	30

Factor II - Interpersonal/Professional	*Item Number*
Demonstrates commitment to teaching.	1
Demonstrates competence in communication skills.	2
Shows understanding of the purposes, organizations, and operation of the total education program of the school.	3
Acts in a professional and ethical manner.	4
Cooperates with others in planning curriculum.	16
Is flexible in adjusting plans to deal with unplanned events.	18
Values students' ideas.	20
Is considerate and fair in relations with pupils.	33

Factor III - Leadership	*Item Number*
Functions as an effective change agent.	5
Shows leadership in curriculum development.	8
Seeks professional growth opportunities.	10
Takes professional leadership positions beyond the school.	14
Makes effective use of community resources.	23
Shows leadership qualities among peers.	32

Sample and Procedures

Institutions identified a random sample of 300 graduates from the years 1985 to 1990. Those with fewer than 300 graduates surveyed their total population. The names and addresses were forwarded to the University of New Hampshire where 2,917 Surveys of Graduates were distributed; 1,430 Surveys of Graduates were returned and 1,390 were usable for analysis representing an overall 48% rate of return. Six hundred eighty-seven graduates who were teaching (70% of those teaching) gave permission for the team to contact their principal. Six hundred eighty-seven Teacher Effectiveness Surveys were distributed and 481 returned representing a 70% rate of return. The surveys were collected and analyzed at the University of New Hampshire. Statistical analyses were calculated by SPSS and the primary research team completed the content analysis of the open ended questions. For the current study responses from the leadership portion of the graduates survey and to Parts I and II of the Teacher Effectiveness Survey were used.

Results

Research Question #1: What are the performance levels of teacher education graduates from the eleven institutions between 1985 and 1990 as measured by entrance into the profession, retention, and general assessment of teaching effectiveness and leadership behaviors?

Entry into Teaching

Eighty-three percent of the entire sample entered teaching (reported teaching for at least one year). Graduates of 1985-1990 are summarized in Figure 2. National studies in the 1980s show from 40 to 83% of graduates of preservice programs entering teaching with most programs reporting around 60% entry into teaching (Coley & Thorpe, 1986; Feistritzer, 1983). Data from national studies of graduates of teacher education programs entering teaching from 1985 to 1990 were not available but clear

evidence of a tight teaching job market during this time leads to the logical conclusion that entry rates might be lower than 60% for these years.

We must be cautious in generalizing that 83% of all teacher education graduates from the eleven institutions enter teaching. It is logical to assume that those who did not respond to the survey may be more likely not to have entered teaching. With a return rate of 48% for the entire sample, actual entry figures may be below the 83% figure noted above. (These cautions apply equally to other studies; most of which report similar return rates.) Those institutions with the lowest return rates might expect the largest over- estimation of entry rates. On the other hand, an earlier study at the University of New Hampshire (Andrew, 1990) with a 94% return rate of a random sample of graduates from 1976 to 1986, showed an 85% entry rate for four year program graduates and a 93% entry rate for five year program graduates.

Retention

Eight-four percent of those who entered teaching are still teaching (70% of the total sample). The mean years in teaching is 2.7. The sample, graduates of 1985-1990, limited graduates to between one and five years of teaching. Retention rates based on years since program completion are shown in Figure 2 below.

Figure 2: Entry and Retention of Graduates from 1984-1990

Year of Completion	Number of Grads.	Number Entering	Percentage Entering	Number Still Tchng.	Percentage Still Tchng.	Percentage of all Grads Still Tchng.
84-85	85	61	72	47	77	55
85-86	131	115	88	94	82	72
86-87	208	185	89	150	82	72
87-88	292	255	87	215	84	74
88-89	271	238	88	204	86	75
89-90	344	260	76	226	87	66
TOTALS	1331	1114	84	936	84	70

Studies of retention in teaching show high attrition rates for teachers, with most of the attrition taking place in the first two years of teaching. Studies over the past 40 years have shown as much as 60% attrition within five years of entry (Charters, 1970; Geer, 1966; Mark & Anderson, 1977). Schlechty and Vance (1983) report even higher attrition rates for academically superior teachers. An OERI longitudinal study (1991) of graduates of the class of 1972 showed about 61% of teacher education graduates still in teaching in 1986. However, other data presented in this study show only 41% of the cohort group still teaching in 1986. The period of 1980-1986 was one of steadily increasing salaries and a strong teaching job market. The period of our study (1985-1990) represents a period of generally tightening job market, increased number of graduates from teacher education programs and decrease in rate of salary growth, leading to the expectation that fewer graduates would enter or stay in teaching.

Our results, finding 70% of all graduates still in teaching and 84% of those entering the profession to be still teaching, are significantly different from most other studies of graduates of teacher education programs.

Principals Evaluations of Teaching Performance

Seventy percent of those graduates in the sample who were teaching gave permission to have their principals complete an evaluation of their teaching. Seventy percent of the principals responded (N = 481). The principals were sent surveys from the office of the research coordinator indicating that the teacher had given permission to contact the principal for an evaluation.

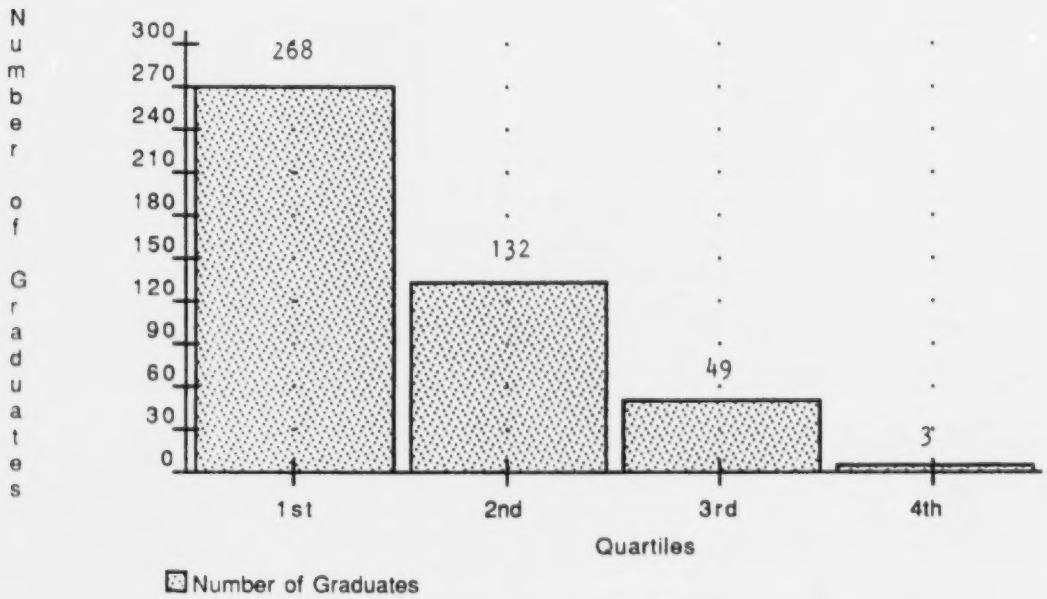
In Part I of the survey, principals were asked the following:

Compared to teachers of <u>similar teaching experience</u>, please rate this teacher's performance:

___ first quartile (highest)
___ second quartile
___ third quartile
___ fourth quartile

Results are shown in Figure 3.

Figure 3: <u>Performance Rating of Graduates</u>



In Part II of the survey, principals were asked to use a five point scale to rate the teacher's performance on 35 items describing generally accepted teaching competencies and attitudes related to good teaching. In only six of the 35 items were

less than 75% of graduates rated below high or very high (four or five) on the five point scale. Based on a factorial validity and reliability analysis of the 35-item survey, three factors were identified as described on page 7. The mean scores on each factor for the entire sample are shown below:

Factor	N	Mean Score (1= very low; 5 = very high)
Instruction	478	4.18
Interpersonal/Attitudinal	478	4.30
Leadership/Professional Growth	477	3.90

We are guarded in accepting the uniform and extraordinarily high ratings from principals as being consistent with performance evaluations using trained raters who might observe our graduates teaching over a reasonable period of time. The limitations of both rating scales of this type and principals' evaluation of teaching are described in more detail in the Limitations of the Study section of this paper.

In Part III of the survey, principals were asked to identify strengths and weaknesses of graduates. The top 11 factors from content analysis were all positive characteristics including 52 descriptions of teachers as gifted or outstanding. Other frequently cited strengths include outstanding interpersonal skills, a growth oriented and self-improvement attitude, enthusiasm, the taking of leadership roles, creativity, cooperativeness, caring and compassionate attitude to children, professional attitude, organizational skills, and excellence with extracurricular activities. Few negative factors were cited. Classroom management was the only factor with more than three respondents.

Leadership

As discussed above, leadership behaviors were considered important outcome variables for graduates of the eleven institutions. It would not be logical to expect substantial leadership behavior in beginning teachers and that was clearly the case

for our sample. The mean score on the leadership factor for principals surveys was considerably lower than instructional or interpersonal scores (M = 3.9, SD = .74).

It would be reasonable to expect leadership behaviors to increase after the first two or three years of teaching, once basic teaching skills have been mastered. To test this assumption leadership items (see Figure 1) on the graduate questionnaire were compared for graduates with one to three years of teaching and those with four or more years of teaching. Significance ($p < .05$) was found on 17 of the 20 leadership items with 15 of the 17 significant at $p < .01$. After three years of teaching, leadership behaviors increased significantly.

Research Question 2: Are there differences in performance levels of graduates of four year and extended year programs as measured by entrance into the profession, retention, and general assessment of teaching effectiveness and leadership behaviors? (Extended includes both "five year" integrated undergraduate-graduate programs and "fifth year" post-baccalaureate entry programs.)

Entry

Based on prior research (Andrew, 1990), it was predicted that differences in entry and retention would be found by comparing graduates of four year programs with graduates of extended programs (integrated undergraduate-graduate and graduate only).

In the eleven university study, ninety percent of extended program graduates reported entering teaching. Eighty percent of four year graduates reported entering teaching. Differences were significant. x^2 (1, N = 1358) = 24.21, p = .0000.

Retention

There was also a significant difference in the percentage of those presently teaching when comparing graduates of four year and five year/graduate level programs. Chi Square comparisons showed a significantly higher percentage of extended program graduates still teaching: x^2 (1, N = 1151) = 16.33, p = .00005.

Eighty-seven percent of extended program graduates who entered teaching were still teaching. Seventy-eight percent of four year program graduates who entered teaching were still teaching.

When asked if graduates intended to still be teaching in five years, graduates of extended programs were more likely to say "yes." x^2 (2, N = 1333) = 9.73, p = .0077.

Classroom Performance

For this study, graduates of institutions with four year programs were compared on the first two parts of the Teacher Effectiveness Survey to graduates of institutions with extended programs. There were no significant differences in either the assignment of students to the top two quartiles of performance (Section I), or in the three factor scores for Part II of the Principals Survey.

No comparisons were made for Part III of the Teacher Effectiveness Survey.

Research Question 3: Are there individual institutions and programs whose graduates excel in any performance area as measured by entrance into the profession, retention, and general assessment of teaching effectiveness and leadership behaviors?

Entry

As noted above major percent entry differences were associated with differences in program structure (four year vs. extended programs). These differences explained most inter-institutional differences although individual program variations do exist.

Retention

When all schools were compared without grouping by type of program (using a 2 x 11 Chi Square) even greater differences in retention were noted than for four year versus extended programs. The three schools with highest retention rates were schools with five year programs.

When asked if graduates expect to be teaching in five years, there were significant inter-institutional differences. x^2 (20, N = 1346) = 56.632, p = .000. The three institutions with highest frequency of "yes" responses were those with five year programs.

Classroom Performance

No significant inter-institutional differences in performance were found in the assignment of graduates to the top quartile. One of the schools stood out with higher percentage of graduates assigned to the top quartile. The school had a five year program.

When assignment of teachers to the two top quartiles was compared, there were again significant program/institutional differences. Again, the school with higher assignment of graduates to the top two quartiles had a five year program.

On Part Two of the Principal's questionnaire, few inter-institutional differences were found. When items were grouped into three factors and mean factor scores for each institution were compared by analysis of variance, no significant differences were found, ($p < .05$). When frequency of top ratings by principals (4s and 5s) were compared on all 35 items, only two items showed significant institutional differences [subject matter knowledge, x^2 (10, N = 478) = 24.2, p = .007; teaches in a clear and logical manner, x^2 (20, N = 475) = 16.03, p = .05]. We conclude that principals assessment of graduates of the eleven institutions show few inter-institutional differences.

Leadership

While the leadership factors (leadership/professional development factor) on the principals questionnaire showed no significant differences among programs, differences were found among programs on leadership items in the graduate questionnaire. (The Graduate Questionnaire was not factor analyzed, so items were

treated separately.) These items asked students to self-report how often they functioned in certain leadership or professional development roles.

Figure 4 below identifies the leadership items examined and analysis of variance among programs.

Figure 4: Institutional variation of graduates on self-reports on leadership/ professional development behaviors

Leadership Factor	Analysis of Variance			
Lead teacher on a team	F	(10, 1129)	= 2.30,	p = .0115
Committee head	F	(10, 1131)	= 3.42,	p = .0002
Curriculum development	F	(10, 1133)	= 5.25,	p = .0001
Peer supervisor	F	(10 1122)	= 4.47,	p = .0001
Department head	F	(10, 1106)	= 4.77,	p = .0001
Workshop presenter	F	(10, 1123)	= 2.34,	p = .0144
Cooperating teacher	F	(10, 1115)	= 2.93,	p = .0012
Researcher	F	(10, 1119)	= 1.64,	p = .0913
Beginning teacher mentor	F	(10, 1112)	= 2.09,	p = .0230
Teacher union representative	F	(10, 1106)	= 1.65,	p = .0888
Curriculum coordinator	F	(10, 1113)	= 3.83,	p = .0001
Attend professional conference	F	(10, 1169)	= 4.10,	p = .0001
Share expertise with other teachers	F	(10, 1162)	= 0.69,	p = .7347
Attempt to influence educational decisions in district	F	(10, 1129)	= 4.75,	p = .0001
Attempt to influence educational decisions in your school	F	(10, 1144)	= 3.05,	p. = .0008
Share new knowledge at faculty meetings	F	(10, 1148)	= 3.27,	p = .0003
Collaborate with colleagues on new projects	F	(10, 1150)	= 1.73,	p = .0700
Challenge rules/procedures when professional issue at stake	F	(10, 1124)	= 0.48,	p = .9011
Seek feedback on effectiveness as teacher	F	(10, 1162)	= 2.10,	p = .0220
Take professional leadership position beyond the school	F	(10, 1131)	= 1.35,	p = .2009

Significant differences ($p < .01$) were found between programs on 13 of the 20 leadership items. Further work is needed to factor analyze the Graduate Questionnaire and examine inter-institutional differences on the leadership factor.

Limitations of the Study

A review of follow-up studies of graduates of teacher education programs indicates that few institutions conduct any form of performance assessment of graduates (Ayers, 1988). Most follow-up studies involve questionnaires to graduates which focus on an appraisal of the teacher preparation program. We chose to explore a more outcome based evaluation of our programs and sought some measure of teachers' on-the-job performance as judged by both self-reports and by the people who employ the teachers.

There is clear recognition of the limitations of self-reporting by graduates. There is also evidence that little correlation exists between the average principal's assessment of teacher performance and other measures of teacher effectiveness (Medley & Coker, 1987).

Supervisors who use rating scales often base evaluations on overall impressions and little variation is found within ratings in separate categories (McGreal, 1990).

McGreal discusses research on a variety of limitations of rating scales including the halo effect, leniency, rater bias and validity. In the case of our research, evaluation of 89% of our graduates as performing in the first and second quartiles based on the performance of all teachers of similar experience make one suspicious that some of the above limitations may apply to our study.

The use of a survey with 35 items asking ranking of competencies or dispositions is susceptible to the criticisms leveled at all such assessments. Items come from review of process-outcome research and restrict teaching to isolated competencies. Current researchers suggest a more holistic framework for

assessment. "Teaching is complex; meaningful units of practice must be fairly large in order to take into account relationships among teacher, students, content and pedagogy, and will not form a neat list that can systematically be used across subject matter, grade levels, and institutional variations" (Brookhart & Loadman, 1992). While the use of a rating scale for teacher performance is fraught with possible limitations, it was an appropriate approach for our purpose which was to gain a general assessment of teacher education programs and of the competence of a group of graduates of teacher education programs. Competencies and attitudes were kept to broad areas where we could find the greatest agreement that we were dealing with generally agreed upon contributory components of good teaching.

Due to the large scope of our study (graduates of eleven institutions who were teaching in more than 35 states and several foreign countries) and the limited resources to conduct the study, we chose to seek the best available source of data. In future research we are considering the use of more holistic, site-based assessments of teacher performance with trained observers.

There are several other limitations of this study:

(1) There is considerable variation in programs within four-year, five-year and fifth year organizational patterns. This variation makes generalizations difficult and also allows significant differences to be washed out by the grouping of data.

(2) There were large differences in return rate among institutions, thereby weighting the pooled returns toward certain programs.

(3) The student survey was poorly constructed. Several questions were confusing to respondents or didn't clearly provide answers. These limits and poor formatting led to confusion and extra work in data entry. There were also too many open ended questions making data entry, interpretation and analysis difficult. The student survey also proved to have too many separate research questions with too little depth in some of the areas.

Discussion and Summary

The performance levels of graduates from the eleven institutions is extraordinarily high. Entry into teaching and retention exceeds rates reported in most other studies. Graduates of extended programs enter at significantly higher rates and show higher rates of retention than do graduates of four year programs. Our study confirms the earlier findings of Andrew (1990) which show significant differences in entry and retention rates of graduates of four year and extended programs. Regardless of individual program variation, the fact of extending programs appears to increase both entry and retention. The logical explanation is that students choosing an extended teacher education program that requires at least a year of post-baccalaureate study are more committed to teaching than some of their four year program counterparts. It is also logical to conclude that they may experience more success in the early years of teaching. This contributes to higher retention rates.

Principals assigned nearly 60% of our graduates to the top quartile of performance and 89% to the top two quartiles of performance. These results are consistent with descriptive data from other parts of our study which show graduates who excel academically, who are choosing a variety of up-to-date teaching strategies, and who are confident in their ability to make a difference.

There is clearly great program variation among eleven institutions spread out across the United States. These individual program variations make generalizations about most effective practices difficult to make. Measures of institutional variation (Research Question 3) indicate possible further relationships between extended programs in the survey and other performance measures. The high scoring institutions with regard to principals' assignment of graduates to top quartile and top two quartiles were institutions with five year programs.

Our results also confirm the logical conclusion that there are outstanding programs of many types in teacher education.

Our analysis suggests that certain institutions do produce graduates who stand out in certain outcome areas. Our next step will be to study specific programs to attempt to link certain goals, characteristics, practices and organizational patterns with desired outcomes.

While institutions in the consortium hope to learn from each other how to better prepare teachers, two other outcomes of this study are of more general interest. First, the on-going collaborative research effort allows each institution to participate in an organized follow-up of graduates from which to evaluate programs and plan for program change. It also allows each institution to make comparisons of its programs and graduates to a group of similar programs and graduates across the country. This kind of common framework for comparison has never before been available.

Second, assessment of this subset of teachers being prepared in the United States may help us make progress in an effort to wipe out the negative public and professional image of teacher preparation and teachers that persists. While the national press and national studies of teacher education continue to focus on broad brush reports of teacher education, a growing subset of teacher preparation programs is developing a remarkable success story, one that confounds the reputed evidence of low test scores, moderate academic achievement, inadequate classroom performance, and short teaching careers.

The results we present are true of only our eleven institutions and all others like us. With nearly 1,300 institutions preparing teachers, there is tremendous diversity. It is illogical and unproductive to paint all of teacher education with the same brush. There are institutions doing a remarkably effective job of selecting and preparing outstanding teachers for our nation's schools.

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